

MAZDA ANNOUNCES SKYACTIV-VEHICLE DYNAMICS TECHNOLOGIES

FIRST IN THE SERIES, G-VECTERING CONTROL, TO BE INTRODUCED WITH UPDATED MAZDA AXELA IN JAPAN

HIROSHIMA, Japan (July 13, 2016) – Mazda Motor Corporation has announced SKYACTIV-VEHICLE DYNAMICS, a series of new-generation vehicle motion control technologies. The first in the series, G-Vectoring Control, will be introduced across Mazda's entire model range, starting with the updated Mazda Axela (known as Mazda 3 outside Japan), which goes on sale in Japan today. The first North American application will come later this year in the 2017 Mazda6.

Part of the SKYACTIV Technology suite, SKYACTIV-VEHICLE DYNAMICS provide integrated control of the engine, transmission, chassis and body to enhance the car's *Jinba Ittai* feel—a sense of connectedness between car and driver that distinguishes Mazda vehicles.

The first technology in the SKYACTIV-VEHICLE DYNAMICS series, G-Vectoring Control (GVC) was born of Mazda's human-centered development philosophy, implementing the novel idea of using the engine to enhance chassis performance. It is the world's first control system to vary engine torque in response to steering inputs in order to provide integrated control of lateral and longitudinal acceleration forces and optimize the vertical load on each wheel for smooth and efficient vehicle motion.*

Optimizing the load on each tire brings the movements of the car more in line with the driver's intentions, reducing the need for steering corrections, including many that are made unconsciously. The outstanding traction the system provides inspires confidence and makes driving more fun. Changes in the acceleration forces acting upon vehicle occupants are smoother, reducing torso sway and making for a more comfortable ride. In addition, GVC significantly improves handling and stability on wet, snowy and unpaved roads.

GVC benefits drivers of all skill levels in a wide range of situations: from low-speed urban commutes to highway driving, winding roads, and even emergency maneuvers. In addition, it is a highly versatile system adaptable to vehicles of any class and drive type. The only requirements are a SKYACTIV engine, which allows precise control over torque output, and a SKYACTIV chassis, which enables superior dynamic performance.

Mazda aims to enhance customers' driving experience, heightening satisfaction and the "bond" people have with their Mazda vehicles. That sense of "Jinba Ittai" performance is based on Mazda's human-centered vehicle development philosophy, which focuses on using human physiology and psychology to design enjoyable vehicle experiences based on how customers actually use their vehicles rather than merely chasing catalog performance metrics.

For more information about G-Vectoring Control, please visit the online Mazda Newsroom on Inside Mazda at: <https://insidemazda.mazdausa.com/newsroom/g-vectoring-control/>.

*As of June, 2016 (production models, based on Mazda's research)

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 [PHOTOS \(1\)](#)

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